

THE TECHNOLOGICAL TEACHER: HOW EDUCATIONAL TECHNOLOGY IS CHANGING THE ROLE OF TEACHERS IN THE HIGH SCHOOL CLASSROOM

Shane Anthony Hoon (Georgetown University)

ABSTRACT FOR POSTER

We live in a world that is rapidly evolving through technology. This evolution has led to a changing cultural ideology and how we function day to day. The influences of technology have become ubiquitous in almost every aspect of our current society, including in our educational systems. As expectations have risen within our classrooms, for both students as well as teachers, we are seeing more and more educational technology being implemented into academia and at all levels.

Recent studies have looked at the correlational and causal influences of educational media on students' performances in the classroom. Current criticisms suggest that some educational content creates a sort of social gap among children, yet I would argue that the same can be said for schools that perhaps cannot afford such tools and technologies when compared with those that have the funds and resources readily available.

There is a demonstrated assumption that all educational technologies are beneficial in the classroom. While it can be argued that these technologies may aid in student development and transmission of information, my hypothesis is that issues of misuse and displacement grow as the art of teaching is being replaced with computer programs and educational media. The role of the teacher is becoming one more of a mediator for new technologies. The uses of educational technologies may be effective in the right context and under the right control; it is not only problematic, but irresponsible to assume that all educational technologies are successful and that they can be substitutes for teachers in traditional education systems. While I believe that most educators will respond favorably in acknowledging that new technologies have assisted in their everyday teaching practices, both in preparation and in presentation, I do foresee there being concern as to the progression of this trend and potential fears of being left behind and outdated. As we continue to try and keep up with advancing technology, the movement of this trend in education has noticeably changed the environment of higher education and we are seeing those changes seep down into our high school and elementary school systems as well.

It has been emphasized that there needs to be greater awareness of children's media in the larger society. Hopefully this project will motivate further attention towards and critique of the educational media currently used inside of the classroom. As previous studies have indicated, there is already a social push towards regulating children's media as well as developing further media literacy among children. While teachers and educators should not necessarily be held solely liable for such a responsibility, there is some rationale for developing media literacy and an appreciation for these technologies (uses and applications) in a controlled, educational environment such as a classroom. Presumably, to better appease all those interested and who advocate for more educational technology in schools, why not designate learning how to use and apply new technologies as a new elective subject, independent from others? This would potentially create new teaching positions for educators who are specialized in teaching with technology. It could also alleviate the pressures that exist on current educators to incorporate these tools into their classrooms, which arguably has modified their individual teaching styles and practices.

Current high school standards of course curriculum and educational criteria have placed an escalating emphasis on educators to incorporate media learning into the classroom in order to stay competitive and ensure student success and technological aptitude. As our educational systems continue to stray away from traditional methods of teaching due to the influence of technology, the role of the educator has changed. From the educator's perspective, how has the introduction of new technology into the classroom modified the ways that subjects and materials are presented, researched and applied? How have these technologies altered the dynamics of the classroom in terms of how educators approach teaching? To fully understand and answer these questions, we must look to those fundamentally involved in the process, those who are actually guiding and assisting our youth through this digital maze: The educators and teachers themselves. How has the role of the teacher/educator changed as a result of new educational technology? What are some factors influencing teachers' use of technology in the classroom? How do teachers generally feel about educational technology?

The reason for this analysis is to better understand how educational technology has either facilitated or hindered the approaches that high school educators are using within their everyday practices. The functional intent of this project is to investigate current teaching practices and teachers' perceptions of technology in order to determine the inherent value of this push for technology in the classroom. The larger goal is to find a reasonable compromise between these educational technologies and traditional teaching practices. If educators can develop a reliable means of teaching media literacy and competency within the school system using these technologies, this may help assuage some of the social problems that now exist with children's use of technology and media. This could also potentially result in finding new ways to incorporate these forms of technology and media into the larger society.

In anticipating what this study may find, it is likely that some previous assumptions may change and teachers are in fact not as resistant to educational technology. When used properly, technology can provide incredible benefits to both teachers and students at other times it can detract from learning. The issue is not necessarily that technology is the problem, but rather the lack of development and understanding on the part of the users, the teachers and students. Educational technology has produced numerous benefits for teachers and this study is not discounting that fact. It is recognized that technology as a resource tool, has contributed endless possibilities for student learning, yet there have been negative aspects as well. These are not necessarily the fault of the technology as much as misuse, inconsistency, and a lack of understanding from the education world.

The area of educational technology is expansive and well researched, thus there are many topics and larger issues regarding educational standards and practices that this study will not explore. This project intends to illustrate how the incorporation of new media and technology has potentially mediated the classroom environment and subsequently changed the role of the teacher, all of this from the perspective of the professional educator. While this project will introduce some historical background and a general review of recent studies and research, the majority of the content will originate from the exploratory research and original data collected for the purpose of this study. Additionally, this study does not reject the notion that educational technology can be a beneficial and effective resource within the classroom. Rather it reviews how these tools are being used, what they are replacing and to what degree are they necessary for achieving academic success.

The objective of this poster, which reflects a small tranche of an overall larger thesis, is to critically investigate this technological shift in education and to understand what effects it is having on student learning, but more importantly, teaching practices. The overarching questions that this thesis examines are: How has the role of the teacher/educator changed as a result of new educational technology? What are some factors influencing teachers' use of technology in the classroom? Finally, how do teachers generally feel about educational technology?

While initial research has offered a mixed bag of perspectives and attitudes, the initial hypothesis for this project was that the teacher has become more of a facilitator of technology and that some of the art of teaching had been lost. The purpose of this study was to investigate this change from the perspective of the teacher in order to better understand the benefits and potential consequences of educational technology. Primary fieldwork for this study was collected through a teacher survey, personal interviews, and classroom observations.

The implementation of educational technology has been seen to have presented numerous benefits for many within the education system. However, what these technologies have also presented various challenges and unintended consequences. Some of those challenges being accessibility, cost effectiveness, lack of support and technological know-how, credibility of resources, and reliability of software and hardware to name a few. It has also been recognized that the pressure on teachers to implement technology in the classroom has been heavily influenced by society, the administration and institution itself, and even through professional pressures from colleagues in the field as well as simply trying to stay up-to-date in order to remain effective. What this has meant for teachers and students within the classroom is a shift in the approach to learning.

Our society has become even more inundated with technology and finding ways to implement it into our everyday lives and activities, yet at what cost? This presentation is meant to serve as a springboard for the larger discussion regarding the use and role of technology within the classroom and the advantages and disadvantages that may arise as a result of our growing reliance on such technology.